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| EXAMINER | | | | |
| HOLLOWAY III, EDWIN C | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/585,122

Applicant(s)

FORSSTROM, GORAN

Examiner

Edwin C. Holloway, III

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2010.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-12 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 17 September 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

EXAMINER'S RESPONSE

1. Applicant's submission filed 17 September 2010 has been entered. Claims 1-12 are pending. The examiner has considered the new presentation of claims and applicant's arguments in view of the disclosure and the present state of the prior art. And it is the examiner's position that the claims are unpatentable for the reasons set forth in this Office action::

Drawings

2. Replacement drawings were received on 17 September 2010. These drawings are approved.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Rix '781 (US 20040056781 including incorporated US 6650254) in combination with Iggulden (US5579002).

Regarding claim 1, Rix '781 discloses system (computer input device 38) for control and monitoring equipment, comprising: a control panel (base 42, control panel in par 0143-0144); and at least one control member (input members 40), wherein the control member comprises a readily movable module (46,48,50) which may be detachably located on the front surface (communication surface 44) of the control panel, and wherein the module communicates in a wireless manner with a central unit (base microcontroller

100) , via which an externally controlled unit (host 64) are influenced/controlled. See figs. 1,6 and pars 0041, 0047-0049 0068-0069 and 0074-0078.

Regarding the new limitation that at least one movable module "actively" communicates with a central unit that influences/controls external units, Rix discloses that the input members may each include a transmitter (last three lines of par 0045) for active communication to central unit 42 that influences/control external unit (host 64). Further, Rix '781 (par 0145) incorporates by reference US Application Ser. No. 09542011 that became Rix '254 (US 6650254). Therefore, the disclosure of Rix '254 is part of Rix '781. Rix '254 disclosed that the wireless module may communicate by any known broadcast technique or protocol (col. 7 lines 14-26 and col. 24 lines 34-41) and an active transmitter, such as a Bluetooth transmitter, is a known technique or protocol that is disclosed in Rix '781 (pars 0068,0069).

Rix '781 differs from claim 1 by disclosing an externally controlled unit rather than the claimed units.

Iggulden disclose an analogous art user configurable control device for controlling a plurality of units (devices). See col. 4 lines 1-6 and 36-48.

Regarding claim 1, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Rix '781 the controlled/influenced units/devices of Iggulden to allow the user to make manual selection of a multiplicity of functions such as controlling consumer electronic devices (TV, VCR, stereo, etc.) suggested by the control of host computer or other device in Rix '781.

Regarding claim 2, Rix '781 discloses wherein the modules are adapted to work with wirelessly transferred electrical energy transmitted by an electrical energy transmitter (116) located in or adjacent the control panel. See pars 0077-0079, 0099 and 0105.

Regarding claim 3, Rix '781 includes illumination elements such as LEDs to indicate functions (par 0067, 0076), but does not expressly disclose a light source arranged in the control panel and comprising a light used for background lighting of the module located on the control panel.

Iggulden disclose an analogous art user configurable control device with light sources such as LEDs for illuminating movable keys from below to in response to actuation (fig 12 col. 9 lines 22-33, col. 10 lines 13-32)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Rix '781 the limitation of a light source arranged in the control panel and comprising a light used for background lighting of the module located on the control panel as disclosed in Iggulden to indicate actuation of the module.

Regarding new claim 4, the at least one movable module comprises an internal electric power source would have been obvious in view of the internal power source in Rix '781 (par 0046).

Regarding new claim 5, the control panel comprises at least one opening configured to receive the at least one movable module, wherein the at least one movable module fits in the at least one opening in the control panel would have been obvious in

view of the slots 106 in Iggulden for receiving and holding the key modules and suggested by Rix '781 disclosing that the keys be attached to a panel that may be any size, shape and/or contour (par 0049) and/or Rix '254 disclosing an attachment surface including a matrix of receptacles that may have a variety of shapes and sizes (col. 7 lines 28-41).

Regarding new claim 6, the at least one movable module comprises a flange to retain the at least one movable module in the at least one opening would have been obvious in view of the overhang the key cap body 112 and/or tab 116 to retain key 110 in Iggulden (fig. 6,7,9).

Regarding new claim 7, the at least one movable module magnetically attached to control panel would have been obvious in view of the magnet attachment in col. 7 lines 16-26 and col. 24 lines 42-53 of Rix '254 that is incorporated by reference in Rix '781 (par 0145).

Regarding new claim 8, at least one light source configured to light the at least one movable module, wherein the at least one light source is internal to the at least one movable module would have been obvious in view of the module including a display in Rix '781 (pars 0085, 0114) and or the display element including any one of a variety of display devices such as LED, LCD or the like in Iggulden (col. 10 lines 13-31)

Regarding new claim 9, the movable module comprises at least one indicator, pointer, pushbutton, switch, or display would have been obvious in view of the module including buttons, switch (82), pointing devices or display in Rix '781 (pars 0084,0085,

0096,0114) and/or the rotary knobs, slide switches, toggle switches, joysticks, display elements or buttons in Iggulden (col. 10 lines 1-65).

Regarding new claim 11, the at least one movable module communicates with the central unit with Bluetooth would have been obvious in view of incorporated Rix '254 disclosing that the wireless module may communicate by any known broadcast technique or protocol (col. 7 lines 14-26 and col. 24 lines 34-41) and Bluetooth is a known technique or protocols that is disclosed in Rix '781 (pars 0068,0069).

Regarding new claim 12, the at least one movable module comprises at least one control element would have been obvious in view of the control elements (keys, buttons, button pads, thumb pads, joysticks, sliders, dials, track pads, track balls, jog/shuttle wheels, displays, strain gauge, pointing devices, acoustic speakers, switch 82 or microprocessor 140) in Rix 781 pars (0084,0085, 0096,0108,0114) and/or the keys being "control elements" in Iggulden (abstract).

5. Claims 5,6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Rix '781 (US 20040056781 including incorporated US 6650254) in combination with Iggulden (US5579002) as applied above in view of Bramesfeld (US 6140593).

Bramesfeld discloses an analogous art reconfigurable switch array panel housing 12 having a single through bore 18 for each switch module/cap 20. See fig. 1 and col. 1 lines 18-53

Regarding new claim 10, it would have been obvious to one of ordinary skill in the

art at the time the invention was made to have included in the combination applied above a plurality of movable modules, wherein the control panel comprises a plurality of openings configured to receive the movable module, wherein one movable module fits in each opening in the control panel would have been as disclosed in Bramesfeld because Rix '781 disclosing that the keys be attached to a panel that may be any size, shape and/or contour (par 0049) and/or Rix '254 disclosing an attachment surface including a matrix of receptacles that may have a variety of shapes and sizes (col. 7 lines 28-41).

If new claim 5 is interpreted to include one opening per module, then such would have been obvious for the same reasons applied above to claim 10.

Regarding new claim 6, the at least one movable module comprises a flange to retain the at least one movable module in the at least one opening would have been obvious in view of the overhang the key cap body 112 and/or tab 116 to retain key 110 in Iggulden (fig. 6,7,9) and/or the shoulder 44 in Bramesfeld (col. 3 lines 6-10) to engage the front face of the panel to prevent excess pushing.

Response to Arguments

6. Applicant's arguments filed 17 September 2010 have been fully considered but they are not persuasive.

The argument that applied prior art lacks the new limitation that at least one movable module "actively" communicates with a central unit that influences/controls external units is not persuasive because Rix discloses that the input members may each include a transmitter (last three lines of par 0045) for active communication to central

unit 42 that influences/control external unit (host 64). Further, Rix '781 (par 0145) incorporates by reference Rix '254 that disclosed the wireless module may communicate by any known broadcast technique or protocol (col. 7 lines 14-26 and col. 24 lines 34-41) and an active transmitter, such as a Bluetooth transmitter, is a known technique or protocols that is disclosed in Rix '781 (pars 0068,0069).

Applicant's argument that Iggulden lacks communication means is not persuasive because Iggulden discloses control elements may contain a resonant circuit that may be inductively coupled without direct contact - or coupled by magnetic, electromagnetic, optical, or acoustic means (col. 9 lines 45-50).

Any new grounds of rejection were necessitated by applicant's amendment.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Henty (US 7006014) discloses a computer system with passive wireless keyboard.
8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin C. Holloway, III whose telephone number is (571) 272-3058. The examiner can normally be reached on M-F from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman, can be reached on (571) 272-3059.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/23/2010
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